CLAIMS

1. A method of making a pattern for the lost-foam casting of molten metal comprising forming a fugitive foam pattern into a desired shape having an outer surface, coating said outer surface with a gas-permeable refractory skin, and selectively treating a strip of said skin to cause the foam immediately underlying said strip to recede from said skin and form a subcutaneous flow-channel in said surface beneath said strip for directing and speeding the flow of said molten metal across said surface during said casting.

2. A method according to claim 1 wherein said treating comprises applying sufficient heat to said strip to soften and cause said underlying foam to recede from said skin.

3. A method according to claim 2 wherein said heat is applied by contacting said skin with a heated tool.

4. A method according to claim 2 wherein said heat is applied by directing a laser beam onto said surface.

5. A method according to claim 2 wherein said heat is applied by contacting said skin with a jet of hot gas.

6. A method according to claim 5 wherein said hot gas is air.

7. A method according to claim 1 wherein said treating comprises wetting said strip with sufficient solvent for said foam to soften said underlying foam sufficiently to cause it to recede from said strip and form said subcutaneous flow-channel.

8. A method according to claim 7 wherein said treating comprises directing a narrow jet of said solvent on to said strip.

9. A method according to claim 7 comprising covering said skin with a temporary mask having a slit therein conforming to said strip, and applying said solvent to said strip through said slit.

10. A method according to claim 1 comprising covering said skin with a temporary mask having a slit therein conforming to said strip, and treating said skin through said slit.

11. A method according to claim 7 wherein said foam comprises expanded polystyrene, and said solvent is selected from the group consisting of acetone, benzene, carbon tetrachloride, chloroform, cyclohexane, 1,2dichloro methane, dioxane, ethyl acetate, ethyl benzene, pyridine, tetrahydrofuran, toluene and xylene.

12. A method according to claim 10 wherein said treating comprises applying heat to said strip through said slit, and said mask comprises a thermal shield for thermally insulating such of said skin as lies adjacent said strip from said heat.

13. A method according to claim 7 comprising swabbing said solvent on to said strip.

14. A method according to claim 7 wherein said foam comprises polymethylmethacrylate and said solvent is selected from the group consisting of chlorobenzene, tetrahydrofuran, methylisobutylketone, n-butylchloride, 3-heptanone, and 4-heptanone.